## <u>Laparoscopic paraesophageal hernia repair combined to bariatric surgery :</u> <u>experience of a single center</u>

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## **Abstract**

**Introduction:** True paraesophageal hernias (PEH) represent around 5% of all hiatal hernias. Although laparoscopic PEH repair has been shown to be safe in the obese population, a combined surgical management for morbid obesity and PEH remains challenging.

**Materiel & methods:** Retrospective analysis of patients operated between 04/2010 - 10/2018 for laparoscopic PEH repair and combined bariatric surgery, was performed. Pre- and post-operative clinical, endoscopic and radiologic findings and morbidity rates were detailed.

Results: Overall, 13 patients (8 female; 5 male), with a mean age of 57 years and a mean BMI of 47.4+/-6.5 kg/m² underwent PEH repair with a combined bariatric procedure. Combined to PEH repair, 12 sleeve gastrectomies and 1 RYGB were performed. All patients underwent primary laparoscopic PEH repair, except for the revisional RYGB. 3 patients (23%) had crural mesh reinforcement, with the rest undergoing primary crural closure. Early post-operative morbidity occurred in 4 patients (31%): one grade 2 (pneumonia); one grade 3 (PE, hematoma and acute renal failure); two grade 4 (intraabdominal abscess; transient respiratory insufficiency). 30-day mortality rate was 0%. Median length of stay was 2 days (1-7). Median follow-up was 6 months (1-25). Mean %EWL at 6 months was 46%. Anatomic hiatal hernia recurrence was diagnosed in 1 case.

**Conclusion**: Concomitant laparoscopic PEH repair and bariatric surgery represent complex foregut surgery cases. Our small case series supports the combined surgical approach; however, morbidity can be significant (31%). Long term follow-up is needed to assess hiatal hernia recurrence rate.